

PB-0004 CIP

<110> Walker, Michael G.
Volkmuth, Wayne
Klingler, Tod M.

<120> POLYNUCLEOTIDES COEXPRESSED WITH MATRIX-REMODELING GENES

<130> PB-0004 CIP

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PB-0004 CIP

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PB-0004 CIP

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<213> Homo sapiens

<220> -

<223> 3948614CB1

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<211> 551

<212> PRT

<213> Homo sapiens

<220> -

<223> 627722CD1

<400> 21

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Ile	Glu	Glu	Asp	Lys	Leu	Lys	His	Gln	His	Leu	Lys	Lys	Lys	Ala	
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Leu	Arg	Glu	Lys	Trp	Leu	Leu	Asp	Gly	Ile	Ser	Ser	Gly	Lys	Glu	
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Gln	Glu	Glu	Met	Lys	Lys	Gln	Asn	Gln	Gln	Asp	Gln	His	Gln	Ile	
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Gln	Val	Leu	Glu	Gln	Ser	Ile	Leu	Arg	Leu	Glu	Lys	Glu	Ile	Gln	
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Asp	Leu	Glu	Lys	Ala	Glu	Leu	Gln	Ile	Ser	Thr	Lys	Glu	Glu	Ala	
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Ile	Leu	Lys	Lys	Leu	Lys	Ser	Ile	Glu	Arg	Thr	Thr	Glu	Asp	Ile	
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Ile	Arg	Ser	Val	Lys	Val	Glu	Arg	Glu	Glu	Arg	Ala	Glu	Glu	Ser	
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Ile	Glu	Asp	Ile	Tyr	Ala	Asn	Ile	Pro	Asp	Leu	Pro	Lys	Ser	Tyr	
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Ile	Pro	Ser	Arg	Leu	Arg	Lys	Glu	Ile	Asn	Glu	Glu	Lys	Glu	Asp	
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Asp	Glu	Gln	Asn	Arg	Lys	Ala	Leu	Tyr	Ala	Met	Glu	Ile	Lys	Val	
				170					175						180
Glu	Lys	Asp	Leu	Lys	Thr	Gly	Glu	Ser	Thr	Val	Leu	Ser	Ser	Ile	
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Pro	Leu	Pro	Ser	Asp	Asp	Phe	Lys	Gly	Thr	Gly	Ile	Lys	Val	Tyr	
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Asp	Asp	Gly	Gln	Lys	Ser	Val	Tyr	Ala	Val	Ser	Ser	Asn	His	Ser	
				215					220						225
Ala	Ala	Tyr	Asn	Gly	Thr	Asp	Gly	Leu	Ala	Pro	Val	Glu	Val	Glu	
				230					235						240
Glu	Leu	Leu	Arg	Gln	Ala	Ser	Glu	Arg	Asn	Ser	Lys	Ser	Pro	Thr	
				245					250						255
Glu	Tyr	His	Glu	Pro	Val	Tyr	Ala	Asn	Pro	Phe	Tyr	Arg	Pro	Thr	
				260					265						270
Thr	Pro	Gln	Arg	Glu	Thr	Val	Thr	Pro	Gly	Pro	Asn	Phe	Gln	Glu	
				275					280						285
Arg	Ile	Lys	Ile	Lys	Thr	Asn	Gly	Leu	Gly	Ile	Gly	Val	Asn	Glu	
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Ser	Ile	His	Asn	Met	Gly	Asn	Gly	Leu	Ser	Glu	Glu	Arg	Gly	Asn	
				305					310						315
Asn	Phe	Asn	His	Ile	Ser	Pro	Ile	Pro	Pro	Val	Pro	His	Pro	Arg	
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Ser	Val	Ile	Gln	Gln	Ala	Glu	Glu	Lys	Leu	His	Thr	Pro	Gln	Lys	
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Arg	Leu	Met	Thr	Pro	Trp	Glu	Glu	Ser	Asn	Val	Met	Gln	Asp	Lys
					350				355					360
Asp	Ala	Pro	Ser	Pro	Lys	Pro	Arg	Leu	Ser	Pro	Arg	Glu	Thr	Ile
					365				370					375
Phe	Gly	Lys	Ser	Glu	His	Gln	Asn	Ser	Ser	Pro	Thr	Cys	Gln	Glu
					380				385					390
Asp	Glu	Glu	Asp	Val	Arg	Tyr	Asn	Ile	Val	His	Ser	Leu	Pro	Pro
					395				400					405
Asp	Ile	Asn	Asp	Thr	Glu	Pro	Val	Thr	Met	Ile	Phe	Met	Gly	Tyr
					410				415					420
Gln	Gln	Ala	Glu	Asp	Ser	Glu	Glu	Asp	Lys	Lys	Phe	Leu	Thr	Gly
					425				430					435
Tyr	Asp	Gly	Ile	Ile	His	Ala	Glu	Leu	Val	Val	Ile	Asp	Asp	Glu
					440				445					450
Glu	Glu	Glu	Asp	Glu	Gly	Glu	Ala	Glu	Lys	Pro	Ser	Tyr	His	Pro
					455				460					465
Ile	Ala	Pro	His	Ser	Gln	Val	Tyr	Gln	Pro	Ala	Lys	Pro	Thr	Pro
					470				475					480
Leu	Pro	Arg	Lys	Arg	Ser	Glu	Ala	Ser	Pro	His	Glu	Asn	Thr	Asn
					485				490					495
His	Lys	Ser	Pro	His	Lys	Asn	Ser	Ile	Ser	Leu	Lys	Glu	Gln	Glu
					500				505					510
Glu	Ser	Leu	Gly	Ser	Pro	Val	His	His	Ser	Pro	Phe	Asp	Ala	Gln
					515				520					525
Thr	Thr	Gly	Asp	Gly	Thr	Glu	Asp	Pro	Ser	Leu	Thr	Ala	Leu	Arg
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Met	Arg	Met	Ala	Lys	Leu	Gly	Lys	Lys	Val	Ile				
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<220> -
 <223> 1556751CD1

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 Val Pro Ala Ala Arg Pro Gln Thr Met Val Thr Gly Pro Ser Cys
 35 40 45
 Ser Ser Pro Gly Leu Gln Asn Phe Ser Pro Gln Arg Lys Glu Asn
 50 55 60
 Arg Ala Cys Ala Cys Trp Gln Asn Ala Gly Pro Ala Pro Lys Asn

	65	70	75											
Pro	Met	Cys	Val	Arg	Leu	Lys	Val	Gly	Arg	Pro	Gln	Ala	Ser	Gln
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Arg	Lys	Leu	Lys	Glu	Thr	Gly	Leu	Cys						
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<400> 23

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				20				25						30
Glu	Glu	Gly	Ser	Pro	Arg	Glu	Phe	Ile	Tyr	Leu	Asn	Arg	Tyr	Lys
				35				40						45
Arg	Ala	Gly	Glu	Ser	Gln	Asp	Lys	Cys	Thr	Tyr	Thr	Phe	Ile	Val
				50				55						60
Pro	Gln	Gln	Arg	Val	Thr	Gly	Ala	Ile	Cys	Val	Asn	Ser	Lys	Glu
				65				70						75
Pro	Glu	Val	Leu	Leu	Glu	Asn	Arg	Val	His	Lys	Gln	Glu	Leu	Glu
				80				85						90
Leu	Leu	Asn	Asn	Glu	Leu	Leu	Lys	Gln	Lys	Arg	Gln	Ile	Glu	Thr
				95				100						105
Leu	Gln	Gln	Leu	Val	Glu	Val	Asp	Gly	Gly	Ile	Val	Ser	Glu	Val
				110				115						120
Lys	Leu	Leu	Arg	Lys	Glu	Ser	Arg	Asn	Met	Asn	Ser	Arg	Val	Thr
				125				130						135
Gln	Leu	Tyr	Met	Gln	Leu	Leu	His	Glu	Ile	Ile	Arg	Lys	Arg	Asp
				140				145						150
Asn	Ala	Leu	Glu	Leu	Ser	Gln	Leu	Glu	Asn	Arg	Ile	Leu	Asn	Gln
				155				160						165
Thr	Ala	Asp	Met	Leu	Gln	Leu	Ala	Ser	Lys	Tyr	Lys	Asp	Leu	Glu
				170				175						180
His	Lys	Tyr	Gln	His	Leu	Ala	Thr	Leu	Ala	His	Asn	Gln	Ser	Glu
				185				190						195
Ile	Ile	Ala	Gln	Leu	Glu	Glu	His	Cys	Gln	Arg	Val	Pro	Ser	Ala
				200				205						210
Arg	Pro	Val	Pro	Gln	Pro	Pro	Pro	Ala	Ala	Pro	Pro	Arg	Val	Tyr
				215				220						225
Gln	Pro	Pro	Thr	Tyr	Asn	Arg	Ile	Ile	Asn	Gln	Ile	Ser	Thr	Asn
				230				235						240

Glu Ile Gln Ser Asp Gln Asn Leu Lys Val Leu Pro Pro Pro Leu
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Pro Thr Met Pro Thr Leu Thr Ser Leu Pro Ser Ser Thr Asp Lys
260 265 270
Pro Ser Gly Pro Trp Arg Asp Cys Leu Gln Ala Leu Glu Asp Gly
275 280 285
His Asp Thr Ser Ser Ile Tyr Leu Val Lys Pro Glu Asn Thr Asn
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Arg Leu Met Gln Val Trp Cys Asp Gln Arg His Asp Pro Gly Gly
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Trp Thr Val Ile Gln Arg Arg Leu Asp Gly Ser Val Asn Phe Phe
320 325 330
Arg Asn Trp Glu Thr Tyr Lys Gln Gly Phe Gly Asn Ile Asp Gly
335 340 345
Glu Tyr Trp Leu Gly Leu Glu Asn Ile Tyr Trp Leu Thr Asn Gln
350 355 360
Gly Asn Tyr Lys Leu Leu Val Thr Met Glu Asp Trp Ser Gly Arg
365 370 375
Lys Val Phe Ala Glu Tyr Ala Ser Phe Arg Leu Glu Pro Glu Ser
380 385 390
Glu Tyr Tyr Lys Leu Arg Leu Gly Arg Tyr His Gly Asn Ala Gly
395 400 405
Asp Ser Phe Thr Trp His Asn Gly Lys Gln Phe Thr Thr Leu Asp
410 415 420
Arg Asp His Asp Val Tyr Thr Gly Asn Cys Ala His Tyr Gln Lys
425 430 435
Gly Gly Trp Trp Tyr Asn Ala Cys Ala His Ser Asn Leu Asn Gly
440 445 450
Val Trp Tyr Arg Gly Gly His Tyr Arg Ser Arg Tyr Gln Asp Gly
455 460 465
Val Tyr Trp Ala Glu Phe Arg Gly Gly Ser Tyr Ser Leu Lys Lys
470 475 480
Val Val Met Met Ile Arg Pro Asn Pro Asn Thr Phe His
485 490